Amendments to the Claims

For the Examiner's convenience, this Amendment & Request for Reconsideration includes the text of all claims under examination. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently amended): A printing method for forming an image by using a print head, wherein the print head has a plurality of arrayed chips, the chips each ~~having~~ have a plurality of print elements arranged in a column ~~columns~~ direction, ~~and having a~~ the plurality of print elements ~~arranged~~ are divided in a number of time-division drive blocks, ~~the print elements are equal in number to an integer times the number of time-division drive blocks~~ the plurality of print elements include the first print elements and at least two second print elements situated near the end of the chip in relation to the first print elements, and the chips are arranged so that ~~at least two~~ the second print elements in adjoining chips are aligned in a scan direction with printing positions which overlap in the scan direction ~~forming a set of print elements, said print head comprising a number of sets of print elements~~; wherein

the chips are arranged so that the first print elements in adjoining chips are not aligned in the scan direction;

the number of ~~sets of~~ second print elements ~~aligned in the scan direction~~ is equal in number to an integer times the number of drive blocks;

the printing method comprising the steps of:

moving the print head and a print medium relative to each other in the scan direction that crosses ~~a direction of~~ the columns ~~of the print elements~~ direction; and

dividing the first print elements into the plurality of drive blocks and activating the drive blocks of the first print elements on a time-division basis to form an image on the print medium;

wherein drive timings with which to activate the ~~set of~~ second print elements ~~aligned in the scan direction~~ have the same time-division drive timing.

2. Canceled.

3. (Original): A printing method according to claim 1, wherein the plurality of print elements in the print head are arranged in an entire widthwise printable range of the print medium.

4. (Original): A printing method according to claim 1, wherein the plurality of print elements in the print head are ink jet print elements that can be activated to eject ink from nozzles.

5. (Original): A printing method according to claim 4, wherein the ink jet print elements have electrothermal transducers that generate energy for ejecting ink.

6. (Currently amended): A printing apparatus for forming an image by using a print head, comprising:

a print head having a plurality of arrayed chips, the chips each having a plurality of print elements arranged in a column ~~columns~~ direction, ~~and having a~~ the plurality of print elements being divided in a number of time-division drive blocks, ~~the print elements are equal in number to an integer times the number of time-division drive blocks~~ the plurality of print elements

including the first print elements and at least two second print elements situated near the end of the chip in relation to the first print elements;

the print head and a print medium are moved relative to each other in a scan direction that crosses ~~a direction of~~ the column~~s of the print elements~~ direction;

the plurality of print elements of each of said drive blocks are activated in the drive blocks on a time-division basis to form an image on the print medium;

the first print elements in adjoining chips are not aligned in the scan direction;

~~at least two~~ the second print elements in adjoining chips are aligned in the scan direction with printing positions which overlap in the scan direction ~~forming a set of print elements, said print head comprising a number of sets of print elements~~; and

the number of ~~sets of~~ second print elements in the adjoining chips aligned in the scan direction is equal to an integer times the number of time-division drive blocks.

7. (Currently amended): A printing apparatus according to claim 6, wherein the second print elements ~~aligned in the scan direction~~ are allocated to the same drive block for activation.

8. (Original): A printing apparatus according to claim 6, wherein the plurality of print elements in the print head are arranged in an entire widthwise printable range of the print medium.

9. (Original): A printing apparatus according to claim 6, wherein the plurality of print elements in the print head are ink jet print elements that can be activated to eject ink from nozzles.

10. (Original): A printing apparatus according to claim 9, wherein the ink jet print elements have electrothermal transducers that generate energy for ejecting ink.

11. (Currently amended): A print head for forming an image, comprising:

a plurality of arrayed chips, the chips each having a plurality of print elements arranged in a column ~~columns~~ direction, ~~and having a~~ the plurality of print elements ~~arranged~~ being divided in a number of time-division drive blocks~~, the print elements being equal in number to an integer times the number of time-division drive blocks~~ the plurality of print elements including the first print elements and at least two second print elements situated near the end of the chip in relation to the first print elements;

wherein the print head and a print medium are moved relative to each other in a scan direction that crosses ~~a direction of~~ the column~~s of the print elements~~ direction;

wherein the plurality of print elements of each of the drive blocks are activated in the drive blocks on a time-division basis to form an image on the print medium;

wherein the first print elements in adjoining chips are not aligned in the scan direction;

wherein ~~at least two~~ the second print elements in adjoining chips are aligned in the scan direction with printing positions which overlap in the scan direction forming a set of print elements, said print head comprising a number of sets of print elements;

wherein the number of ~~sets of~~ second print elements in the adjoining chips aligned in the scan direction is equal to an integer times the number of drive blocks.

12. (Currently amended): A print head according to claim 11, wherein the second print elements ~~aligned in the scan direction~~ are allocated to the same drive block for activation.

13. (Original): A print head according to claim 11, wherein the plurality of print elements are arranged in an entire widthwise printable range of the print medium.

14. (Original): A print head according to claim 11, wherein the plurality of print elements are ink jet print elements that can be activated to eject ink from nozzles.

15. (Original): A print head according to claim 14, wherein the ink jet print elements have electrothermal transducers that generate energy for ejecting ink.

16. (Currently amended): A program for forming an image by using a print head, wherein the print head has a plurality of arrayed chips, the chips each have a plurality of print elements arranged in a column ~~columns~~ direction, ~~and having a plurality of~~ the print elements arranged are divided in a number of time-division drive blocks, ~~the print elements are equal in number to an integer times the number of time-division drive blocks~~ the plurality of print elements include the first print elements and at least two second print elements situated near the end of the chip in relation to the first print elements, and the chips are arranged so that ~~at least two~~ the second print elements in adjoining chips are aligned in a scan direction with printing positions which overlap in the scan direction ~~forming a set of print elements~~, the program causing a computer to execute the steps comprising:

moving the print head and a print medium relative to each other in the scan direction that crosses ~~a direction of~~ the columns ~~of the print elements~~ direction;

activating the drive blocks of the plurality of print elements on a time-division basis to form an image on the print medium; and

activating the ~~set of~~ second print elements ~~aligned in the scan direction~~ at the same time-division drive timing.

17. (Original): A storage media readable by a computer and storing the program of claim 16.